

REMARKS

The above amendments to the above-captioned application along with the following remarks are being submitted as a full and complete response to the Office Action dated August 2, 2004. In view of the above amendments and the following remarks, the Examiner is respectfully requested to give due reconsideration to this application, to indicate the allowability of the claims, and to pass this case to issue.

Status of the Claims

Claims 17-22 are pending in this application. Claims 1-16 are being cancelled without prejudice or disclaimer. New claims 17-22 are being added to more particularly point out and distinctly claim the subject invention. Applicant hereby submits that no new matter is being introduced into the application through the submission of this response.

Formality Rejection

Claim 14 was objected to for informalities, and the Examiner had requested correction thereof. As claim 14 is being cancelled without prejudice or disclaimer, this objection thus becomes moot.

Prior Art Rejections

Claims 1 -16 were rejected under 35 U.S.C. §103(a) as being unpatentable over US Patent No. 5,737,022 to Yamaguchi et al. (hereinafter "Yamaguchi") and Japanese Publication No. 08-181983 to Toshihisa et al. (hereinafter "Toshihisa"). This rejection has been carefully considered, but are most respectfully traversed.

The data correction method of the invention (e.g., Fig. 36), as now recited in claim 17, comprises the steps of: inputting a data stream of coded data (e.g., the data stream of a block/frame in Fig. 7(a)) generated (e.g. by a block unit in Figs. 19 or 25) according to a coding syntax (derived from "*the specification or the standards of video,, audio, .etc*" p. 39, line 2) which requires inserting *block unit error detection data* (e.g., time stamp sequence numbers in Fig. 7) into the inputted data stream; detecting an error interval (e.g., the missing second packet), which contains at least one error (e.g., a transmission error causing broken data), in the inputted data stream using the error detection data; correcting said error in the

inputted data stream (e.g., by a data correction unit 707) at least by deleting from or adding in the inputted data stream a data interval not understandable (“in order that the application decoder can accurately identify the position of occurrence of the packet loss, a coding *string not understandable by the application decoder is inserted into the packer loss section*” p. 32, lines 3-6; e.g., “0x00000000” “*data string not found in media decoder standard*” 8052 in Fig. 15) by a subsequent decoder (e.g., an application decoder) thereby providing a corrected data stream (e.g., 206 in Fig. 15) complying with the coding syntax (“*correcting stream data so as to comply with the specification or the standards of video, audio, etc in the service of file transfer type, before processing is performed at the application decoder using the insertion data for error correction*” p. 38, line 24- p.39, line 5); and outputting the corrected data stream 206 to the subsequent decoder.

Claim 22 recite a flag in the processing II, I, III described on page 61 of the specification. This flag can be “not_coded” flag (p. 48, lines 7-11), a “cbpy” flag, or a “cbpc” flag (p. 49, lines 15-21). The flags indicate whether the macroblock is encoded. If the flag indicates “encoded,” the decoder will proceed decoding. If the flag indicates “not encoded,” the decoder simply uses macroblock data at the same position of the previous frame.

“One frame of video image handled by MPEG-4 comprises a luminance signal (*Y signal: 2001*), and two chrominance signals (*Cr signal: 2002; Cb signal: 2003*) as shown in FIG. 23. ... each frame of the video image is divided to small blocks as shown in FIG. 23, and decoding processing is performed in block unit called macroblock. FIG. 24 shows a structure of the macroblock. Each macroblock comprises a *Y signal block 2101 of 16x16 pixels*, and a *Cr signal block 2102 of 8x8 pixels* and a *Cb signal block 2103 being in spatial concurrence*. (p. 42, 2nd paragraph).”

“At a communication terminal where there are strict demands on memory request, CPU power, and power consumption, only simple error correction may be adopted for achieving real-time decoding (p. 38, last line to the bottom).”

“As a result, the delay of error detection, in which an error data may be handled as a complying data with the decoder specification by the [subsequent/application] decoder, can be avoided, and disturbance of the reconstructed image and audio can be prevented. The application decoder as mentioned here includes media decoder such as file decoder of file format, video decoder, audio decoder, scene description decoder (processing to reconstruct display position of a plurality of objects), etc. Therefore, the data string not understandable by the application decoder (insertion data for error detection) varies according to the type of the decoder contained in the application decoder. For instance, in case the application

decoder comprises file decoder of MP4 file and media decoder of video-audio as shown in FIG. 39, the data strings not understandable by all of the file decoder, the video decoder, and the audio decoder may be regarded as "coding strings not understandable by the application decoder (insertion data for error detection)". Also, as shown in FIG. 38, in case the application decoder comprises audio decoder and video decoder, the received packet is processed by dividing to video data and audio data. In this respect, different insertion data for error detection should be prepared for each payload type, and coding string not understandable (insertion data for error detection) as a whole by the application decoder can be defined (p. 32, line 13- p. 33)".

Applicants respectfully contend that none of the cited prior art references teaches or suggest a data correction method including such a step of “correcting said transmission error in the inputted data stream at least by deleting from or adding in the inputted data stream data not understandable by a subsequent decoder thereby providing a corrected data stream complying with the coding syntax” as does the invention.

In contrast, the prior art described in Yamaguchi in column 1 and relied upon by the Examiner conceals a non-decodable block A (e.g., due to accidental cell loss, col. 1, line 21), and then compensates the WHOLE block A with an adjacent decodable block B (col. 1, lines 49-65). Yamaguchi simply conceal/abandon the WHOLE block A, rather than correcting an error interval WITHIN the block A by deleting from or adding in the inputted data stream/block A a data interval not understandable by a subsequent decoder thereby providing a corrected data stream complying with the coding syntax. It is well established that a rejection based on cited references having contradictory principles or principles that teach away from the invention is improper. In addition, the prior art described in Yamaguchi’s replacement block B is decodable (rather than “not understandable”) by a subsequent decoder. As to Yamaguchi itself, the system uses motion compensation (retrieving most similar data and compensating data) when the error occurs such that it generates and displays decoded “data without any error” (col. 4, lines 39-46). Yamaguchi does not correct any data stream which complies with the coding syntax of a data stream with broken data. Yamaguchi shares the same deficiencies as the prior art described in column 1 therein.

Toshihisa is relied upon by the Examiner to teach a unique word notice means for indicating a packet portion in error. However, Toshihisa’s error notice unique word is standing along by itself, rather than being enclosed in any corrected block/frame which complies with the coding syntax of a block with broken data. As such, Toshihisa fails to

compensates for the deficiencies of Yamaguchi.

Applicants contend that neither Yamaguchi, Toshihisa, nor their combination teaches or discloses each and every feature of the present invention as disclosed in independent claim 17. As such, the present invention as now claimed is distinguishable and thereby allowable over the rejections raised in the Office Action. The withdrawal of the outstanding prior art rejections is in order, and is respectfully solicited.

Conclusion

In view of all the above, clear and distinct differences as discussed exist between the present invention as now claimed and the prior art reference upon which the rejections in the Office Action rely, Applicants respectfully contend that the prior art references cannot anticipate the present invention or render the present invention obvious. Rather, the present invention as a whole is distinguishable, and thereby allowable over the prior art.

Favorable reconsideration of this application is respectfully solicited. Should there be any outstanding issues requiring discussion that would further the prosecution and allowance of the above-captioned application, the Examiner is invited to contact the Applicants' undersigned representative at the address and phone number indicated below.

Respectfully submitted,

Stanley P. Fisher
Registration Number 24,344

Juan Carlos A. Marquez
Registration Number 34,072

REED SMITH LLP
3110 Fairview Park Drive, Suite 1400
Falls Church, Virginia 22042
(703) 641-4200
December 2, 2004

SPF/JCM/JT